

Generators

- Create a list with all numbers from 1 to 20
- using list comprehension, create a list from the above with only the odd numbers
- using list comprehension, create a list from the above multiple by 10
- Create a generator function to produce endless random numbers from a given range:

```
1  g1 = genrandom(10,20)
2  next(g1) # 16
3  next(g1) # 13
4  ....
```

- Add an option to change the range using send
- Create a generator function to produce endless numbers from a given range in a circular flow :

```
1  g1 = gencir(3)
2  next(g1) # 0
3  next(g1) # 1
4  next(g1) # 2
5  next(g1) # 3
6  next(g1) # 2
7  next(g1) # 1
8  next(g1) # 0
9  next(g1) # 1
10 ....
```

- Add an option to change the max number using send
- Create a generator function to retrieve lines from log file in the following format:

```
1  1-this is an example of a debugging message
2  2-this is a warning message
3  3-this is an error message
4  2-another warning
5  2-yet another warning
6  1-debug msg
7  3-error<
```

The first char is the severity type (1-debug , 2-warning, 3-error)

- The generator function gets 2 parameters: number of lines to retrieve and the severity type
- Add an option to change the parameters using send